

**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29CFR1910.1200. Standard must be consulted for specific requirements.

**SECTION 1 - GENERAL INFORMATION**

Name	ZECOL PRODUCTS COMPANY		
Address	4635 WILLOW DRIVE	Emergency Telephone No.	(CHEM-TEL) 1-800-255-3924
City, State, and ZIP	MEDINA, MN 55340	Other Information Calls	(763) 478-3438
Signature of Person Responsible for Preparation (Optional)		Date Prepared	JAN 1, 2002 (REV)

<b>H</b>	<b>2</b>
HEALTH	
<b>F</b>	<b>4</b>
FLAMMABILITY	
<b>R</b>	<b>1</b>
REACTIVITY	
Style NC-L503R	
PERSONAL PROTECTION	

**SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY**

Hazardous Component(s) [chemical & common name(s)]	OSHA PEL	ACGIH TLV	CAS NO.
Heptane	400	400	142-82-5
Diethyl Ether	400	400	60-29-7
Carbon Dioxide	5,000	5,000	124-38-9
Upper Cylinder Lubricant	Not Estab.	Not. Estab.	Unknown

**SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS**

Boiling Point	95° F. (Ether)	Specific Gravity (H <sub>2</sub> O=1)	.713
Vapor Density (Air=1)	2.55 (Ether)	Vapor Pressure (mm Hg)	537 (Ether)
Solubility in Water	Slight	Evaporation Rate (N-Butyl Acetate=1)	37.5 (Ether)
Appearance and Odor	Clear Aerosol, Ether Smell		

**SECTION 4 - FIRE & EXPLOSION DATA**

Flash Point	49° F.	Method Used	TCC	Flammable Limits in Air % by Volume	LEL Lower 1.85	UEL Upper 48
Auto-Ignition Temperature	NA	Extinguisher Media	Foam, dry chemical, CO <sub>2</sub>			
Special Fire Fighting Procedure	Handle as extremely flammable liquid. Use water to cool containers exposed to heat. Use air-supplied breathing equipment for enclosed areas.					

Unusual Fire and Explosion Hazards Contents under pressure.

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

**SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA) STARTING FLUID, AEROSOL (cont.)**

Stability  Unstable  Stable Conditions to Avoid Avoid oxidizers. Keep away from heat, sparks, or open flame. Do not store above 120° F.  
Incompatibility (Materials to Avoid) None

Hazardous Decomposition Products Carbon monoxide, carbon dioxide may be formed during combustion.  
Hazardous Polymerization  May Occur  Will Not Occur Conditions to Avoid

**SECTION 6 - HEALTH HAZARDS**

1. Acute Eye, skin, & respiratory irritant 2. Chronic Repeated or prolonged overexposure may cause permanent brain damage and nervous system damage.  
Signs and Symptoms of Exposure Irritated eyes or skin, headache, dizziness, nausea, and loss of consciousness.

Medical Conditions Generally Aggravated by Exposure NA

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

Emergency and First Aid Procedures

**ROUTES OF ENTRY**  
1. Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration.  
2. Eyes Flush with water for 15 minutes. If irritation persists, call a physician.  
3. Skin Remove contaminated clothing and wash with soap and water.  
4. Ingestion Do NOT induce vomiting. Call a physician immediately.

**SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES**

Precautions to be Taken in Handling and Storage Extremely flammable. Store and use away from all heat and ignition sources. Use adequate ventilation.

Other Precautions Keep out of reach of children. Contents under pressure. Do not store above 120° F. Do not puncture or incinerate.

Steps to be Taken in Case Material is Released or Spilled Eliminate sources of heat or ignition. Ventilate area. Apply absorbent material to spill area.

Waste Disposal Methods (Consult federal, state, and local regulations) Dispose of absorbing material or defective containers at an RCRA-approved TS & D facility according to local, state, and federal regulations.

**SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

Respiratory Protection (Specify Type) Use NIOSH approved organic vapor respirator if ventilation is inadequate.

Ventilation Local exhaust should be adequate; use general (mechanical) exhaust if required.

Protective Gloves Neoprene

Other Protective Clothing or Equipment Chemical goggles or safety glasses.

Work/Hygienic Practices Keep away from eyes, skin, and clothing. Do not smoke while using this product.